

SEQUENCE LISTING

<110> RENNO Toufic  
BONNEFOY Jean-Yves

<120> USE OF AN ENTEROBACTERIUM OmpA PROTEIN ASSOCIATED WITH AN  
ANTIGEN FOR GENERATING AN ANTIVIRAL, ANTIPARASITIC OR  
ANTITUMORAL CYTOTOXIC RESPONSE

<130> D 17921

<140> PCT/FR 00/00393

<141> 2000-02-17

<150> FR 99 01917

<151> 1999-02-17

<160> 4

<170> PatentIn Ver. 2.1

<210> 1

<211> 1035

<212> DNA

<213> Klebsiella pneumoniae

<220>

<221> exon

<222> (1)..(1032)

<220>

<221> intron

<222> (1033)..(1035)

<220>

<221> CDS

<222> (1)..(1032)

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tat	gca	ggt	ggt	aaa	ctg	ggt	tgg	tcc	cag	tat	cac	gac	acc	ggt	ttc	96
Tyr	Ala	Gly	Gly	Lys	Leu	Gly	Trp	Ser	Gln	Tyr	His	Asp	Thr	Gly	Phe	
		20					25						30			

tac	ggt	aac	ggt	ttc	cag	aac	aac	aac	ggt	ccg	acc	cgt	aac	gat	cag	144
Tyr	Gly	Asn	Gly	Phe	Gln	Asn	Asn	Asn	Gly	Pro	Thr	Arg	Asn	Asp	Gln	
		35					40					45				

ctt	ggt	gct	ggt	gcg	ttc	ggt	ggt	tac	cag	ggt	aac	ccg	tac	ctc	ggt	192
Leu	Gly	Ala	Gly	Ala	Phe	Gly	Gly	Tyr	Gln	Val	Asn	Pro	Tyr	Leu	Gly	
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ttc	gaa	atg	ggt	tat	gac	tgg	ctg	ggc	cgt	atg	gca	tat	aaa	ggc	agc	240
Phe	Glu	Met	Gly	Tyr	Asp	Trp	Leu	Gly	Arg	Met	Ala	Tyr	Lys	Gly	Ser	
	65				70				75					80		

ggt	gac	aac	ggt	gct	ttc	aaa	gct	cag	ggc	ggt	cag	ctg	acc	gct	aaa	288
Val	Asp	Asn	Gly	Ala	Phe	Lys	Ala	Gln	Gly	Val	Gln	Leu	Thr	Ala	Lys	

85										90										95										
ctg ggt tac ccg atc act gac gat	ctg gac atc tac acc cgt ctg ggc	336																												
Leu Gly Tyr Pro Ile Thr Asp Asp	Leu Asp Ile Tyr Thr Arg Leu Gly																													
100	105 110																													
ggc atg gtt tgg cgc gct gac tcc aaa ggc aac tac gct tct acc ggc	384																													
Gly Met Val Trp Arg Ala Asp Ser Lys Gly Asn Tyr Ala Ser Thr Gly																														
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Val Ser Arg Ser Glu His Asp Thr Gly Val Ser Pro Val Phe Ala Gly																														
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Gly Val Glu Trp Ala Val Thr Arg Asp Ile Ala Thr Arg Leu Glu Tyr																														
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cag tgg gtt aac aac atc ggc gac gcg ggc act gtg ggt acc cgt cct	528																													
Gln Trp Val Asn Asn Ile Gly Asp Ala Gly Thr Val Gly Thr Arg Pro																														
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gat aac ggc atg ctg agc ctg ggc gtt tcc tac cgc ttc ggt cag gaa	576																													
Asp Asn Gly Met Leu Ser Leu Gly Val Ser Tyr Arg Phe Gly Gln Glu																														
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Asp Ala Ala Pro Val Val Ala Pro Ala Pro Ala Pro Ala Pro Glu Val																														
195 200 205																														
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Ala Thr Lys His Phe Thr Leu Lys Ser Asp Val Leu Phe Asn Phe Asn																														
210 215 220																														
aaa gct acc ctg aaa ccg gaa ggt cag cag gct ctg gat cag ctg tac	720																													
Lys Ala Thr Leu Lys Pro Glu Gly Gln Gln Ala Leu Asp Gln Leu Tyr																														
225 230 235 240																														
act cag ctg agc aac atg gat ccg aaa gac ggt tcc gct gtt gtt ctg	768																													
Thr Gln Leu Ser Asn Met Asp Pro Lys Asp Gly Ser Ala Val Val Leu																														
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Gly Tyr Thr Asp Arg Ile Gly Ser Glu Ala Tyr Asn Gln Gln Leu Ser																														
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gag aaa cgt gct cag tcc gtt gtt gac tac ctg gtt gct aaa ggc atc	864																													
Glu Lys Arg Ala Gln Ser Val Val Asp Tyr Leu Val Ala Lys Gly Ile																														
275 280 285																														
ccg gct ggc aaa atc tcc gct cgc ggc atg ggt gaa tcc aac ccg gtt	912																													
Pro Ala Gly Lys Ile Ser Ala Arg Gly Met Gly Glu Ser Asn Pro Val																														
290 295 300																														
act ggc aac acc tgt gac aac gtg aaa gct cgc gct gcc ctg atc gat	960																													
Thr Gly Asn Thr Cys Asp Asn Val Lys Ala Arg Ala Ala Leu Ile Asp																														
305 310 315 320																														
tgc ctg gct ccg gat cgt cgt gta gag atc gaa gtt aaa ggc tac aaa	1008																													
Cys Leu Ala Pro Asp Arg Arg Val Glu Ile Glu Val Lys Gly Tyr Lys																														
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gaa gtt gta act cag ccg gcg ggt taa  
 Glu Val Val Thr Gln Pro Ala Gly  
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1035

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 <212> PRT  
 <213> *Klebsiella pneumoniae*

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 Tyr Gly Asn Gly Phe Gln Asn Asn Asn Gly Pro Thr Arg Asn Asp Gln  
 35 40 45  
 Leu Gly Ala Gly Ala Phe Gly Gly Tyr Gln Val Asn Pro Tyr Leu Gly  
 50 55 60  
 Phe Glu Met Gly Tyr Asp Trp Leu Gly Arg Met Ala Tyr Lys Gly Ser  
 65 70 75 80  
 Val Asp Asn Gly Ala Phe Lys Ala Gln Gly Val Gln Leu Thr Ala Lys  
 85 90 95  
 Leu Gly Tyr Pro Ile Thr Asp Asp Leu Asp Ile Tyr Thr Arg Leu Gly  
 100 105 110  
 Gly Met Val Trp Arg Ala Asp Ser Lys Gly Asn Tyr Ala Ser Thr Gly  
 115 120 125  
 Val Ser Arg Ser Glu His Asp Thr Gly Val Ser Pro Val Phe Ala Gly  
 130 135 140  
 Gly Val Glu Trp Ala Val Thr Arg Asp Ile Ala Thr Arg Leu Glu Tyr  
 145 150 155 160  
 Gln Trp Val Asn Asn Ile Gly Asp Ala Gly Thr Val Gly Thr Arg Pro  
 165 170 175  
 Asp Asn Gly Met Leu Ser Leu Gly Val Ser Tyr Arg Phe Gly Gln Glu  
 180 185 190  
 Asp Ala Ala Pro Val Val Ala Pro Ala Pro Ala Pro Ala Pro Glu Val  
 195 200 205  
 Ala Thr Lys His Phe Thr Leu Lys Ser Asp Val Leu Phe Asn Phe Asn  
 210 215 220  
 Lys Ala Thr Leu Lys Pro Glu Gly Gln Gln Ala Leu Asp Gln Leu Tyr  
 225 230 235 240  
 Thr Gln Leu Ser Asn Met Asp Pro Lys Asp Gly Ser Ala Val Val Leu  
 245 250 255  
 Gly Tyr Thr Asp Arg Ile Gly Ser Glu Ala Tyr Asn Gln Gln Leu Ser

			260					265					270			
Glu	Lys	Arg 275	Ala	Gln	Ser	Val	Val 280	Asp	Tyr	Leu	Val	Ala 285	Lys	Gly	Ile	
Pro	Ala 290	Gly	Lys	Ile	Ser	Ala 295	Arg	Gly	Met	Gly	Glu 300	Ser	Asn	Pro	Val	
Thr 305	Gly	Asn	Thr	Cys	Asp 310	Asn	Val	Lys	Ala	Arg 315	Ala	Ala	Leu	Ile	Asp 320	
Cys	Leu	Ala	Pro	Asp 325	Arg	Arg	Val	Glu	Ile 330	Glu	Val	Lys	Gly	Tyr 335	Lys	
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<210> 3

$\langle 211 \rangle$  10

<212> PRT

<213> Homo sapiens

 $\langle 220 \rangle$ 

<223> Peptide derived from the Mart-1/MelanA antigen expressed by melanoma cells.

<400> 3

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1 5 10

<210> 4

<211> 8

<212> PRT

<213> Homo sapiens

$\langle 220 \rangle$

<223> Derivative of tyrosinase-related protein 2 (TRP-2).

<400> 4

Val Tyr Asp Phe Phe Val Trp Leu  
1 5